

NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

Recreation Area Improvement

(Acre)

Code 562

DEFINITION

Establishing grasses, legumes, vines, shrubs, trees, or other plants or selectively reducing stand density and trimming woody plants to improve an area for recreation.

PURPOSES

To increase the attractiveness and usefulness of recreation areas and protect the soil and plant resources.

Planting of vegetative materials for wind protection, shade, screens, ornamentation, and resistance to heavy human traffic, including secondary benefits of wildlife food and cover.

Thinning and pruning of natural or planted shrubs and trees to provide space for recreational activities, allow air and sun penetration, remove hazardous materials and yet keep aesthetically valuable trees or shrubs.

CONDITIONS WHERE PRACTICE APPLIES

On any area planned for recreational or recreation-wildlife use.

CRITERIA

I. Establishing Plants:

A. Grasses and Legumes – applicable only in open and partially shaded areas.

Seedbed Preparation

1. Shallow plow or use heavy disk, field cultivator or similar type tool.
2. Where trees are present, care should be taken to not cut too deep and cause tree root injury.
3. Prepare a firm seedbed, containing enough fine soil particles for uniform shallow coverage of the seed.

Liming, Fertilizing and Seeding

1. Apply lime and fertilizer according to needs determined by a soil test. Without a soil test, use a minimum of 500 pounds 12-12-12 fertilizer, or equivalent, per acre.
2. Cover seed about ¼ to ½ inch deep in a compact seedbed. Shallow depth (1/4 inch) is better for bluegrass.
3. For spring seeding, seed as early as a seedbed can be prepared (March, April). Make fall seeding during August or to September 10 in northern part of the State, and from August 10 to September 30 in the southern part of the State.
4. On areas where vegetation is difficult to establish or subject to erosion, straw mulch at 1-1/2 tons per acre (70 pounds per 1,000 square feet) may be necessary to insure satisfactory stand establishment and early soil protection.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Indiana NRCS FOTG – February 1971.

Species for Seeding

Table 1. Recreation Area Seeding Guide

Primary Use of Area	Species	Seeding Rate		Suitable pH	Site Suitability*		
		lbs/acre	lbs/1000 ft ²		Droughty	Well Drained	Wet
1. Parking Lots (Unsurfaced)	Tall fescue	40	1	5.4 – 7.5	2	1	2
2. Land Sports (Athletic fields, playgrounds, hard-use areas)	Tall fescue	40	1	5.4 – 7.5	2	1	2
	Tall fescue and Kentucky bluegrass	25 15	5/8 3/8	5.8 – 7.5		1	2
	Tall fescue	25	5/8	5.4 – 7.5	2	1	2
3. Recreation areas surrounding heavy-use areas Golf courses (fairways, roughs) Picnic, camp & scenic areas	Kentucky bluegrass	30-40	¾ - 1	5.8 – 7.5		1	2
	Tall fescue Kentucky bluegrass	15-20 15-20	3/8 – ½ 3/8 – 1/2	5.8 – 7.5		1	2
Open Sunlight	Tall fescue	15-20	3/8 – ½	5.5 – 7.5	2	1	
	Creeping red fescue	15-20	3/8 – ½	5.8 – 7.5	2	1	
Partial Shade	Kentucky bluegrass	15-20	3/8 – ½	5.8 – 7.5	2	1	
	Creeping red fescue	15-20	3/8 – ½	5.8 – 7.5	2	1	
4. Lawns and lawn-type areas	Bluegrass blends		2	5.8 – 7.5	2	1	2
Open Sunlight	Bluegrass blends 90% Redtop 10%		2	5.8 – 7.5	2	1	2
	Creeping red fescue 50% Kentucky bluegrass or Bluegrass blends 50%		2	5.8 – 7.5	2	1	
5. Temporary lawn cover (to be destroyed and re-seeded later)	Annual ryegrasses 90% Redtop 10%		2-3	5.5 – 7.5	2	1	2

* 1 – Preferred, 2 – Will tolerate

B. Trees, shrubs and vines to be used for:

1. Windbreaks on north and/or west sides of area.
2. Erosion control plantings.
3. Screens to hide unsightly views and serve as sound barriers.
4. Barriers to separate various uses, and help direct foot traffic.
5. Provide additional shade and ornamental species.
6. Introduction of plants to attract songbirds and other forms of wildlife.

Planting Materials

1. All “bare rooted” plants should be planted in spring, as early as the condition of the soil will allow, March, April and before May 15 unless stock has been held back in cold storage. Balled-burlapped stock may also be planted in fall during October, November and early December.
2. Woody planting materials may be seedlings, transplants, rooted cuttings, or balled-burlapped stock.

Adapted Species for recreation areas are listed in Table 2 as follow

Table 2. Recreation Area Tree and Shrub Planting Guide ^{a/}

Purpose, Use and Aesthetic Value	Species	Spacing	Growth Rate ^{b/}	Height	Tolerance Sun - Shade	Drainage Requirements ^{c/}		
						Poorly Drained	Well Drained	Droughty
1. Shade & Ornamental:	Trees:							
Evergreen	White Pine	65'	M	90'	X X		1	2
	Red Pine	65'	M	75'	X		2	1
	Norway Spruce	4/ac	S	80'	X X	1	2	
	Blue Spruce	2/ac	VS	60'	X X		1	2
Deciduous								
red and yellow	Sugar maple	65'	S	70'	X		1	2
scarlet	Pin Oak	65'	M	75'	X	1	2	2
red and brown	Red Oak	65'	M	65'	X		1	2
rustic	Bur Oak	65'	S	75'	X	1	2	
red	White Oak	65'	M	90'	X		1	2
brown	Hickory	65'	S	75'	X		1	2
red	Black Gum	65'	M	55'	X X		1	2
yellow	Tulip Poplar	65'	F	100'	X		1	2
yellow	Thornless Honey-locust	65'	F	75'	X	2	1	2
attractive bark	Sycamore	65'	F	90'	X	1	2	
sheds needles	Bald Cypress	65'	M	90'	X	1	2	
yellow	Ginko (male only)	65'	F	60'	X		1	2
white bark	White Birch	1-2' in clump of 3-4	M	40'	X	2	1	
2. Ornamental & Wildlife:	Shrubs and trees:							
Evergreen ^{d/}	Yew	Varied	VS	4-10'	X		1	2
	Hemlock	Varied	S	4-10'	X X	2	1	
	Juniper	Varied	F	4-6'	X		1	2
	Arborvitae	Varied	M	5-15'	X	1	2	
Flowering	Dogwood	Varied	S	20-25'	X		1	2
	Redbud	Varied	S	15-20'	X		1	
	Flowering Crab	Varied	M	20-30'	X		1	
Clump color red	Sumac: Smooth or staghorn	6-8'	F	10-30'	X		1	2
3. Fruiting	Crabapple	Varied	S	20-30'	X		1	
	Blackhaw	Varied	S	15-20'	X X		1	
	Cranberry, highbush	Varied	F	6-10'	X X		1	2
	Honeysuckle, bush	Varied	M	6-16'	X X		1	2

a/ On sites with severe erosion hazards see practice (342) Critical Area Planting.

b/ Growth Rate symbols: F = fast, M = medium, S = slow, VS = very slow.

c/ Drainage Requirements: 1 = preferred, 2 = will tolerate.

d/ The evergreen species should be topped and shaped as required when planted for "Ornamentals" or "Screens and Borders".

Table 2. Recreation Area Tree and Shrub Planting Guide ^{a/} (continued).

Purpose, Use and Aesthetic Value	Species	Spacing	Growth Rate ^{b/}	Height	Tolerance Sun - Shade	Drainage Requirements ^{c/}		
						Poorly Drained	Well Drained	Droughty
4. Screens & Borders								
Evergreen ^{d/}	White Pine	6-8'	M	Top & shear at desired height.	X X		1	2
	Virginia Pine	6-8'	F		X		1	2
	Red Pine	6-8'	M		X		2	1
	Hemlock	2-3'	S		X X	2	1	
	Yew	2-3'	VS		X		1	2
Deciduous	Cranberry, highbush	3-4'	F	6-10'	X X		1	2
	Lespedeza, bicolor var. Natob	11/2-2'	F	4-8'	X X	2	1	2
	Honeysuckle, bush	3-4'	M	6-16'	X X			
	Hawthorne, Washington	4-6'	M	6-16'	X		1	2
5. Ground Cover								
Semi evergreen (broad leaf)	Euonymus Winter-creeper	2-3'	F	2' h x 3' w	X	2	1	
	Ground Myrtle	2'	F	½'	X	2	1	

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II. Thinning and Pruning in natural or planted stands of wood material for recreation area improvement.

A. Thinning.

1. On intensive use areas, leave about 10 to 15 larger (10" + DBH) sound trees per acre for shade.
2. Favor for retention the deep-rooted species such as red oak, bur oak, white oak, sugar maple, hickory, black gum, tulip poplar, etc.
3. Retain some flowering and wildlife food plants such as dogwood, redbud, serviceberry, pawpaw, persimmon, etc.
4. Occasionally there will be portions of a recreational area, where a part of woody cover should be left unthinned, such as odd corners not needed for intensive use, where natural cover makes a screen, and on steep escarpments or erosive areas.

5. Removal of woody materials should be accomplished by cutting flush with the ground line. This will leave topsoil in place, and not injure roots of trees or shrubs being retained.

B. Pruning.

1. Intensive use area trees should have lower limbs removed to a minimum height of 12 feet, so as to provide space for recreation activities and save on cost of maintenance operations.
2. Pruning cuts should be made as close to the tree trunk or main stem as possible. All large limbs should be cut in a method that will not strip or tear bark on remaining part of tree.
3. Where recreation pressure is not heavy and growing space is ample, a few specimen trees should be left unpruned to add natural

beauty. (e.g. Pin Oak, Spruces, White Pine, Red Cedar, etc.)

CONSIDERATIONS

Caution: Chemicals used must be Federally and locally registered and must be applied strictly in accordance with authorized registered uses, directions on the label, and other Federal or State policies and requirements.

Water Quantity

Effects on the water budget, especially on volumes and rates of runoff, infiltration, and transpiration.

Water Quality

Effects of erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances that could be carried by runoff. Important factors are short-term changes caused by construction (sediments, fuels, oils, and other chemicals) compared to long-term changes caused by the same substances resulting from recreation activities.

Effects of changes in ground water from infiltrating soluble substances associated with vegetation management and recreation activities.

PLANS AND SPECIFICATIONS

None available.

OPERATION AND MAINTENANCE

A. Grasses and Legumes:

1. To maintain vigorous cover, make an annual application of fertilizer high in nitrogen.
2. Re-seed or sod areas of high intensity use to maintain adequate cover as the need arises.
3. Frequency and height of mowing will depend upon use of the area.

B. Trees, shrubs and vines:

1. To prevent sprouting, chemically treat stumps immediately after cutting.
2. Poisonous plants like poison ivy should be chemically sprayed and eliminated from recreational areas.
3. Maintain open areas by periodic mowing and/or spraying to prevent the encroachment of undesirable vegetation.